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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/007,136 Filing Date: December 03, 2001 Appellant(s): ALEXANDER ET AL.

> Clint J. Feekes Registration No. 51,670 For Appellant

> > **EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11/09/2009 appealing from the Office action mailed 12/08/2008.

# (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

# (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

#### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (8) Evidence Relied Upon

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## (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-2, 4-22, 24-39, and 41-56 are rejected under 35 U.S.C. 102(e) as being anticipated by Olson (US 7,023,469).

Re claims 1, 20-21, 38 and 56, Olson discloses in computer system (13 and 17 of fig. 1) having graphic user interface (21 of fig. 1) including a display (21 of fig. 1) and a user interface device (18-19 of fig. 1), a method for processing image data (figs. 2-9), the method comprising:

obtaining (27 of fig. 1, Note camera (23 of fig. 1) obtains a monitoring area, region, or zone (fig. 4) for the image processing (27 of fig. 1) processes the monitored zone) at least one processing zone (71 and 72 of figs. 5 and 6, Note processing zone (71, 72)) for processing digital data obtained from one or more digital capture devices (23 of fig. 1, Note more cameras), wherein the at least one processing zone corresponds to a specific geometry (71 and 72 of fig. 4, particular fig. 5, Hallway has a specific geometry) that is a subdivided area represented in each frame (72 of figs. 5 and 6, Note the subdivided area is in each frame);

obtaining a first frame of image data corresponding to one of the digital capture devices (fig. 2A and 2B; fig. 2C and 2D; fig. 2E and 2F; fig. 2G and 2H; see also figs. 5 and 6) that includes the at least one processing zone as a subdivided area (71 of figs. 5 and 6);

displaying a frame (131 of fig. 9) of data within display area (fig. 9) in the graphical user interface (21 of fig.1);

obtaining a designation of at least one processing zone (87 of figs. 6 and 8; and A, 132, and 133 of fig. 9) from the user interface device (21 of fig. 1);

wherein the processing zone (87 of figs. 6 and 8; A of fig. 9) corresponds to a specific geometric shape (86 of figs. 6 and 8) within the display area (figs. 6 and 8) and includes processing rule data (fig. 8, 136 of fig. 9; Note processing rule data are events, objects regions, duration, and actions); displaying the processing zone (87 of figs. 6 and 8; A of fig. 9) within the display area of the graphical user interface (21 of fig. 1);

obtaining a second frame of image data corresponding to the digital capture device(fig. 2A and 2B; fig. 2C and 2D; fig. 2E and 2F; fig. 2G and 2H, figs. 5 and 6, Note second frame as shown in figure 6);

determining whether there is significant change in the image data between the first and second frames within the same at least one processing zone (71 of figs. 5 and 6; the image processing section (27 of fig. 1) saves a reference image from the video camera and compares subsequent images to the reference image; col. 5, lines 32-39; the comparison figs. 5 and 6, where a person entered the hallway), wherein the determination of significant change in the image data is made by evaluating differential data corresponding to an adjustable parameter (136 of fig. 9, Note selection of events, objects, regions, duration, and actions to adjust the processing

zone, A of fig. 9) in the image data that is represented within geometry of the at least one processing zone (figs. 6 and 9, Note the saved image is selected to display and zoom function is performed to recognize the person, which means adjustable parameter); and

processing an event if a significant change in the image data is determined (col. 5, lines 32-39; figs. 4-8; comparison in figures 5 and 6) between the first and second frames within the same at least one processing zone (Note comparing image of figs. 5 and 6 using processing section 27 of fig. 1, zone 71), wherein processing the event includes storing the image data in the same at least one processing zone to mass storage (col. 6, lines 28-58; comparing the image (fig. 5) with the image (fig. 6), the person (86 of fig. 6) appeared in the image (fig. 5), selected image data (person 86 of fig. 2) and then stored at full resolution on the memory (34 of fig. 1); the processing section (27 of fig. 1) saves a selected image of each detected object (person 86 of fig. 6); wherein the selected image or image portion is stored at full resolution) only if significant change in the image data is determined (person entered the hallway is significant change in comparison between two images (figs. 5 and 6)) and excluding image data in the same or different at least one processing zone from being stored (col. 6, lines 49-65; Note selected image or image portion is stored at full resolution) to the mass storage if not significant change in the image data is determined (the image processing section (27 of fig. 1) does not saves each of numerous images of the person (86 of fig. 6) which are obtained while the person walks down the hallway (71 of fig. 6); this disclosure suggests that the processing section (27) excludes the image data at the same or different monitoring area or zone to the storage (34 of fig. 1)).

Re claims 2, 22, and 39, Olson further discloses wherein the specific geometry of the processing zones is characterized by a rectangle (A of fig. 9).

Re claims 4, 24, Olson further discloses wherein the specific geometry is graphically displayed through a user interface (18 and 19 of fig. 1, Note the computer (13 of fig. 1) has a keyboard (18) and a mouse (19) for a user to access WWW, col. 8, lines 17-29, graphically display (21 of fig. 1, figs. 5-9)).

Re claims 5, 25, and 41, Olson further discloses wherein the specific geometry includes a hyperlink (Note the MASTER.HTML file has hypertext links to each of the LOGLIST.HTML files, and the LOGLIST.HTML files are each an HTML shell which invokes an applet that facilitates access to files within the directory containing that particular LOGLIST.HTML file) to one or more monitoring devices capable of input or output to a physical location that corresponds to the processing zone (fig. 7).

Re claims 6, 26, and 42, Olson further discloses wherein evaluating the differential data includes statistically comparing a sample of pixels within the first and second frame of image data (fig. 3; Note stationary object is removed or disappeared).

Re claims 7, 27, and 43, Olson further discloses wherein evaluating the differential data includes evaluating specific color data for individual pixels (fig. 2D and 2E; Col. 3, line 64-col. 4, line5).

Re claims 8, 28, and 44, Olson further discloses wherein the adjustable parameter corresponds to a number of pixels to be compared (figs. 2E and 2E, Note each pixel is compared; see also 86, 87 of fig. 6, Note the adjustable parameter is corresponding to the selected person (86 of fig. 6)).

Re claims 9, 29, and 45, Olson further discloses wherein the adjustable parameters are entered through a graphical user interface (18 and 19 of fig. 1, Note the user can enter a specified

area for processing with a adjustable parameter (136 of fig. 9), for example the user can enter duration from 5-10 and other parameter as shown in fig. 9 as well).

Re claims 10 and 46, Olson further discloses wherein the graphical user interface is a WWW browser user interface (col. 8, lines 17-28).

Re claims 11, 30, and 47, Olson further discloses wherein the adjustable parameter is dynamically modified (136 of fig. 9, Note the user change duration from 5 to 10).

Re claims 12, 31 and 48, Olson further discloses wherein multiple processing zones are obtained from one or more frames of video, wherein at least one processing zone is evaluated using a parameter different from the at least one parameter used in the previously selected processing zone within the one or more frames of video (136 of fig. 9, Note the user defines a zone different from the previous zone at user defined parameters for processing).

Re claims 13, 32 and 49, Olson further teaches wherein at least one processing zone excludes an area from evaluation (86 of fig. 8; and 132, A, and 133 of fig. 9, Note zone A can be excluded from the evaluation).

Re claims 14, 33 and 50, Olson further discloses wherein processing an event includes executing user-defined sequences if a significant change is determined (136 of fig. 9, 27 of fig. 1).

Re claims 15, 34, 51, Olson further discloses wherein processing an event includes sounding alarm (col. 1, lines 35-40).

Re claims 16, 35, and 52, Olson further discloses wherein processing an event includes archiving video data (23 and 27 of fig. 1).

Re claims 17, 36, and 53, Olson further discloses wherein archiving the video includes storing the video data in a file directory corresponding to given time period (fig. 7).

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Re claims 18, 37, and 54 Olson further discloses wherein archiving the video includes naming the file directory according to a time of the day (fig. 7).

Re claims 19 and 55, Olson further discloses a computer-readable medium having computer-executable instructions for performing the method recited in claims 1 and 38 (fig. 1, Note the automatically monitoring system (10 of fig. 1) inherently has a computer-executable instructions for performing the monitoring method as illustrated in figures 5-9).

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 2, 23, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olson (US 7,023,469).

Re claim 3, 23, and 40, Olson teaches the specific geometry of the processing zone is characterized by the rectangle (132, 133, A of fig. 9) and suggests the user may define the region by using the mount pointer to identify the corners of the region (A of fig. 9) by clicking on each corner. Therefore, one skill in the art would use the suggested mouse pointer to create the specific geometry of the processing zone by clicking on each corner in a circular shape as desired. Doing would allow the user to specifically designate the created region (zone) in any

shape such as square, rectangle, or circle of an event in an image and easily monitor for occurrence object of the event within the specified region (zone).

5. Applicant's arguments filed 06/11/2007 have been fully considered but they are not persuasive.

The applicant argues that Olson does not teach a system for storing image data that appears in a processing zone to a mass storage only if a significant change is determined and excluding image data in the same or different processing zone from being stored to the mass storage if no significant change has been determined, pages 15-17 of the remarks.

The examiner respectfully disagrees with the applicant. It is submitted that Olson teaches the processor (27 of fig. 1) processes two images (figs. 5 and 6) for comparison, based on the comparison the processing section (27 of fig. 1) saves the selected image or image portion of the detected object, the detected object is detected base on the motion change within the images (figs. 5 and 6), so this suggests storing image data that appears in a processing zone to a mass storage only if a significant change is determined (col. 6, lines 38-57); the processing section (27) does not save each of the numerous images of the person 86 which are obtained while the person walks down the hallway (fig.6), this suggests that the image data in the same or different processing zone (fig. 5) is excluded when there is no significant change is determined (col. 6, lines 21-23). In view of the discussion above, Olson clearly anticipates the claimed invention.

6. Applicant's arguments filed 06/30/2008 have been fully considered but they are not persuasive.

The applicant argues that Olson does not teach a system for storing image data that appears in a processing zone to a mass storage only if a significant change is determined and excluding image data in the same or different processing zone from being stored to the mass storage if no significant change has been determined in the remarks.

The examiner respectfully disagrees with the applicant. It is submitted that Olson teaches the processor (27 of fig. 1) processes two images (figs. 5 and 6) for comparison, based on the comparison the processing section (27 of fig. 1) saves the selected image or image portion of the detected object in a memory (e.g. 34 of fig. 1), the detected object is detected base on the motion change within the images (figs. 5 and 6), so this suggests storing image data that appears in a processing zone to a mass storage only if a significant change is determined (col. 6, lines 38-57); the processing section (27) does not save each of the numerous images of the person 86 which are obtained while the person walks down the hallway (fig.6), this suggests that the image data in the same or different processing zone (fig. 5) is excluded when there is no significant change is determined (col. 6, lines 21-23). In view of the discussion above, Olson clearly anticipates the claimed invention.

# (10) Response to Argument

- 1. Summary of Cited Reference is acknowledged.
- 2. Independent Claims 1, 21, and 38

A. Independent Claim 1:

The appellant argues that <u>i. Olson fails to teach or suggest the claim element of</u>
"wherein the determination of significant change is made evaluating differential data
corresponding to an adjustable parameter."

The examiner respectfully disagrees with the appellant. It is submitted that Olson discloses wherein the determination of significant change is made evaluating differential data (figures 5 and 6, a person entered the monitored hallway, 71 of fig. 4, is the significant change based upon a succession of the images, figures 5 and 6; col. 4, lines 41-50; col. 6, lines 12-16) and a bounding box around the change region which corresponds to the person, 86 of fig. 6) corresponding to an adjustable parameter (a bounding box is adjustable parameter; col.7, lines 37-44; a setting time is an adjustable parameter, Duration of fig. 9, col. 10, line 55-col. 11, line 3).

The appellant further argues that <u>ii. Olson fails to teach or suggest the claim</u>

elements of "processing an event only if a significant change in the image data is determined

between the first and second frames within the same at least one processing zone, wherein

processing the event includes storing the image data in the same at least one processing zone to a

mass storage only if significant change in the image data is determined..."

The examiner respectfully disagrees with the appellant. It is submitted that Olson discloses processing an event (fig. 9, a person entered the hallway is an event) only if a significant change (comparison between images of figures 5 and 6, there is a change in figure 6, the person entered the hallway) in the image data is determined between the first and second frames (figures 5 and 6; col. 4, lines 41-50; col. 6, lines 12-16) within the same at least one processing zone (71 and 87 of figs. 5, 6, and 8, the hallway is considered at least one processing zone that is the same 704 of figure 7 of the present invention, and the bounding box 87 is considered another processing zone that is the same as 706 of fig. 7 of the present invention), wherein processing (27 of fig. 1) the event includes storing the image data (col. 6, lines 49-57,

the selected image or image portion is stored, where in the selected image or image portion is located within the bounding box which is the person 86; col. 6, lines 49-57; col. 7, lines 31-36) in the same at least one processing zone (e.g. 71 or 87 of figs. 6 and 8) to a mass storage (34 of fig. 1) only if significant change in the image data is determined (the result of the comparison of the images in figures 5 and 6, the person entered the hallway is the change).

The appellant further argues that iii. Olson fails to teach or suggest the claim elements of "excluding image data in the same or different at least one processing zone from being stored to the mass storage if no significant change in the image data is determined."

The examiner respectfully disagrees with the appellant. It is submitted that Olson discloses excluding image data (col. 6, lines 49-57, just a portion of the overall video image is stored, this means the other image data is not stored in the memory) in the same or different at least one processing zone from being stored to the mass storage if no significant change in the image data is determined (col. 7, lines 31-36).

## B. Independent Claim 21

The appellant argues that i. Olson fails to teach or suggest certain elements of Claim 21 as recited: at least one monitoring computing device operable to display the user interface and to obtain one or more processing zones corresponding to the digital image data, wherein the central processing server processes the digital image data to determine whether significant change exists in at least one processing zone between successive frames of the digital image data, and only if a significant change is identified, the central processing server stores the digital image data in the at least one processing zone to a mass storage and excludes the digital

image data in the same or different at least one processing zone from being stored to the mass storage if no significant change is identified.

The examiner respectfully disagrees with the appellant. It is submitted that Olson discloses at least one monitoring computing device (fig. 1) operable to display the user interface (13 of fig. 1) and to obtain one or more processing zones (71 and 87 of figs. 6 and 8) corresponding to the digital image data (figs. 5 and 6), wherein the central processing server (e.g. 17 and 27 of fig. 1) processes the digital image data to determine whether significant change exists in at least one processing zone (71 and 87 of fig. 8) between successive frames of the digital image data (comparison of figures 5 and 6), and only if a significant change is identified, the central processing server stores the digital image data in the at least one processing zone to a mass storage and excludes the digital image data in the same or different at least one processing zone from being stored to the mass storage if no significant change is identified (col. 6, lines 49-57, the selected image or image portion is stored, where in the selected image or image portion is located within the bounding box which is the person 86; col. 6, lines 49-57; col. 7, lines 31-36). All details of limitations have been addressed in part A above.

The appellant further argues that ii. The Office Action failed to address all of the features of Claim 21 as recited a system configured with: "... a monitoring device operable to generate a digital image;" "a central processing server operable to obtain the digital image and generate a user interface;" and "at least one monitoring computing device operable to display the user interface and to obtain one or more processing zones corresponding to the digital image data ..." The Office Action does not fully and clearly state how the Olson reference discloses each of these three separate claim elements.

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The examiner respectfully disagrees with the appellant. It is submitted that Olson discloses a system (fig. 1) configured with a monitoring device (17 of fig. 1, see also figures 8-9) operable to generate a digital image (e.g. 111 of fig. 8); a central processing server (17 and 27 of fig. 1, elements are incorporated to process the digital image) operable to obtain the digital image and generate a user interface (e.g. 18 and 19 of fig. 1); and at least one monitoring computing device (e.g. 17 and 27 of fig. 1) operable to display the user interface and to obtain one or more processing zones corresponding to the digital image data (e.g. 71 and 87 of figs. 8 and 9).

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### C. Independent Claim 38

The appellant's arguments are the same in claim 1. Therefore, the arguments have been addressed in part A above.

#### 3. Dependent Claims 2, 4-20, 22, 24-37, 39, and 41-56

The appellant argues that Olson does not teach "Claims 5, 25, and 41 include the additional recitation of "wherein the specific geometry includes a hyperlink to one or more monitoring devices capable of input or output to a physical location that corresponds to the processing zone."

The examiner respectfully disagrees with the appellant. It is submitted that Olson discloses wherein the specific geometry includes a hyperlink (Note the MASTER.HTML file has hypertext links to each of the LOGLIST.HTML files, and the LOGLIST.HTML files are each an HTML shell which invokes an applet that facilitates access to files within the directory containing that particular LOGLIST.HTML file) to one or more monitoring devices capable of input or output to a physical location that corresponds to the processing zone (fig. 7).

The appellant argues that Olson does not teach claims 6, 26, and 42 include the additional recitation of "wherein evaluating the differential data includes statistically comparing a sample of pixels within the first and second frame of image data."

The examiner respectfully disagrees with the appellant. It is submitted that Olson discloses wherein evaluating the differential data includes statistically comparing a sample of pixels (e.g. col. 3, lines 64-col. 4, line 40, image comprises pixels for comparison) within the first and second frame of image data (fig. 3; Note stationary object is removed or disappeared).

The appellant argues that Olson does not teach claims 7, 27, and 43 include the additional recitation of "wherein evaluating the differential data includes evaluating specific color data for individual pixels."

The examiner respectfully disagrees with the appellant. It is submitted that Olson discloses wherein evaluating the differential data includes evaluating specific color data for individual pixels (fig. 2D and 2E; Col. 3, line 64-col. 4, line 5, black or white color pixels, note a color video camera is used, so the pixels of image captured by the camera are color pixels).

The appellant argues that Olson does not teach claims 8, 28, and 44 include the additional recitation of "wherein the adjustable parameter corresponds to a number of pixels to be compared."

The examiner respectfully disagrees with the appellant. It is submitted that Olson discloses (figs. 2E and 2E, Note each pixel is compared; see also 86, 87 of fig. 6, Note the adjustable parameter is corresponding to the selected person; 86 of fig. 6).

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Appellants submit that "wherein the specific geometry of the processing zone is

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characterized by a circle" is not obvious in light of the cited reference as common knowledge in

the art, nor is it supported in the record.

The examiner would like to show that the user can define a region using the

mouse pointer. This would obviously suggest the user can define a region in any shape by using

the mount pointer.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Tung Vo/

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